

Safety Valves

Type 06381



Cryogenic Safety Valves, angle type, stainless steel, PN40, type tested TÜV-SV.780. S/G

Standard safety valve

Metal to metal seated, closed bonnet

"cleaned and degreased for oxygen service"

Part No. 06381.X.0000

Inlet: male thread type G (BSPP) acc. to ISO 228/1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06381.X.2000

Inlet: male thread type R (BSPT) acc. to ISO 7/1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06381.X.5000

Inlet: male thread NPT acc. to ANSI B 1.20.1, Outlet: female thread type G (BSPP) acc. to ISO 228/1

Part No. 06381.X.6000

Inlet: male thread NPT acc. to ANSI B 1.20.1, Outlet: female thread NPT acc. to ANSI B 1.20.1



Applications:

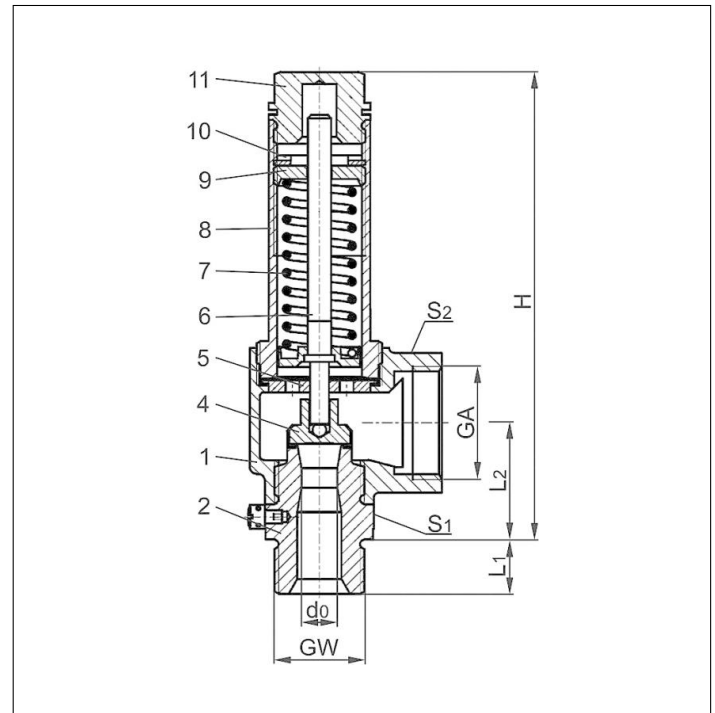
Provided as safety device for protection against excessive pressure in stationary and moveable gas cylinders and pressure vessels. Approved for air gases, vapours and cryogenic liquefied gases incl. LNG.

Working temperature: -196°C / -321°F (77K) up to +185°C / +365°F (458K)

| Materials | DIN EN | ASME/ASTM |
|----------------|--------|-------------------|
| 1 Outlet body | 1.4308 | A 351 CF8 |
| 2 Inlet body | 1.4301 | A 276 Grade 304 |
| 4 Disc | 1.4541 | A 276 Grade 321 |
| 5 Guide plate | 1.4301 | A 276 Grade 304 |
| 6 Stem | 1.4301 | A 276 Grade 304 |
| 7 Spring | 1.4571 | A 313 Grade 316Ti |
| 8 Bonnet | 1.4308 | A 351 CF8 |
| 9 Spring clamp | 1.4301 | A 276 Grade 304 |
| 10 Thread ring | 1.4301 | A 276 Grade 304 |
| 11 Cap | 1.4301 | A 276 Grade 304 |

Essential: Valves are delivered at a set pressure, therefore when ordering please confirm set pressure, medium and temperature.

Standard marking acc. to Pressure Equipment Directive 2014/68/EU (PED).



| Type 06381 | Technical data | | |
|----------------------------------|----------------|------------|------------|
| Nominal size | GW | 1/2 | 3/4 |
| Orifice | d ₀ | 10.5 | 10.5 |
| Dimension code | .X. | 1004 | 1006 |
| Set pressure range | bar | 0.2-25.0 | 0.2-25.0 |
| Outlet | GA | 1 | 1 |
| Height | H | 140 | 140 |
| Length | L ₁ | 14 | 16 |
| Length | L ₂ | 36 | 36 |
| Wrench size across flats | S ₁ | 30 | 30 |
| Wrench size across flats | S ₂ | 41 | 41 |
| Weight | ca. kg | 0.75 | 0.78 |
| Coeff. of discharge from 3.0 bar | α _w | 0.67 | 0.67 |

Dimensions in mm.

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Discharge capacities

Calculation of flow rate acc. to AD2000-Merkblatt A2 / DIN EN ISO 4126-1

Medium:

Air in m³/h at 0°C and 1013.25 mbar

The capacity indicated below is for a fully opened valve.

d₀ - orifice

A₀ - flow area

| Set pressure in bar (g) | GW | 1/2 | 3/4 |
|-------------------------|-----------------------------------|------------|------|
| | d ₀ (mm) | 10.5 | 10.5 |
| | A ₀ (mm ²) | 86.6 | 86.6 |
| | Medium | Air | |
| 0.2 | | 25 | 25 |
| 0.5 | | 48 | 48 |
| 1.0 | | 74 | 74 |
| 1.5 | | 99 | 99 |
| 2.0 | | 123 | 123 |
| 3.0 | | 170 | 170 |
| 4.0 | | 214 | 214 |
| 5.0 | | 258 | 258 |
| 6.0 | | 302 | 302 |
| 7.0 | | 345 | 345 |
| 8.0 | | 390 | 390 |
| 9.0 | | 434 | 434 |
| 10.0 | | 479 | 479 |
| 12.0 | | 566 | 566 |
| 14.0 | | 654 | 654 |
| 16.0 | | 742 | 742 |
| 18.0 | | 830 | 830 |
| 20.0 | | 926 | 926 |
| 22.0 | | 1015 | 1015 |
| 24.0 | | 1103 | 1103 |
| 25.0 | | 1148 | 1148 |
| 26.0 | | - | - |
| 28.0 | | - | - |
| 30.0 | | - | - |
| 32.0 | | - | - |
| 34.0 | | - | - |
| 36.0 | | - | - |
| 38.0 | | - | - |
| 40.0 | | - | - |